Fire Department

Purpose

To provide capable, well trained personnel and necessary equipment to suppress fires and effectively manage Hazardous Chemical accidents that may occur in our community related to transportation or industry; to provide rescue services as needed and basic Life Support through an updated Fire Responder Program. To continue to work toward a more fire-safe community through Loss Prevention activities, including inspections, code enforcement, minimum housing activities and public education programs.

GIS Uses

The Salisbury Fire Department relies heavily on GIS software and data layers. GIS is essential to many aspects of operations, including response planning, annexation planning, resource planning, water supply development and maintenance, and hydrant management. Service areas have been developed using ESRI's Network Analyst. Also, fire incidents are address matched to indicate the location and distribution of fire incidents throughout the City. This information is also used in conjunction with orthophotography for post-incident critiques.

As additional data layers are developed, the department will be able to use GIS in many more ways. Specifically, building footprints will allow fire officials to visualize building layouts in the event of a critical incident. A new street centerline file is needed in order to consistently have updated information from all City departments.

Data Development

The following data layers have been identified as necessary for use by the Fire Department:

Layer Name	Use	Status
Abandoned structures	Indicate locations of abandoned, vacant, or structures not meeting minimum housing codes	Not started
Alternate water sources	Reference	Not started
Annexation areas	Indicate areas slated for annexation	In progress – some areas compiled in CAD
Building footprints	Reference	Not started
Building plans (commercial structures)	Helpful when fighting fires at large/multiple buildings; Reference	Not started
City limit boundary	Reference	Complete
Fire hydrants	Indicate location and other pertinent attributes about hydrants	Not started
Fire incidents (geocoded)	Research/analysis/reference	Not started
Fire station locations	Indicate locations of fire stations	Complete
Floodway	Identify properties within flood-prone areas	Complete; digitized from FEMA maps
Hazardous materials	Indicate locations where hazardous materials are stored	Not started
Inspected City businesses	Indicate locations of inspected City businesses; reference	Currently maintained in FireInfo by Doug Stevens
Institutions	Reference	Complete (in CAD)
Land use	Indicate classifications of land use on a parcel level basis	Completed as a part of 2020 Plan; requires updating.
Land use history	Indicate previous uses of land use on a parcel level basis	Not started
Minimum housing structures	Structures not meeting minimum housing standards; reference	Not started
OPTICOM intersections	Reference	Complete (in CAD)
Parcels	Tax map and parcel number matching; reference	County in process of acquiring data from vendor, ASI
Photos of structures	Reference	Not started
Rowan County fire districts	Reference	Not yet acquired

Streets	Address matching; reference	Currently maintained in CAD; anticipate moving to ArcInfo in early 2002
Water lines	Indicate location of water service lines; reference	Not started

Goals

1. Develop data layers as identified in the ***Data Development*** section.

2. Utilize street centerline, fire station locations, etc. to determine response times for fire stations by distance as well as by time. Further use this information for planning for increased staffing and/or new fire stations.

3. Purchase software or develop an application that enables Fire Department officials to print on demand City street atlas books for use in vehicles.

4. Develop a web-based application available to all fire personnel for ad hoc analysis of fire data.

5. Develop a scaled-down web-based application available to the public so that they can be better informed about fire incidents within the City of Salisbury.